What is the current condition of the Rocky Flats site?

Contaminated water

Deep regional groundwater aquifers were not contaminated by Rocky Flats activities. Shallow contaminated groundwater plumes all emerge to surface water before exiting the site. Where necessary, this groundwater is captured and treated to reduce contaminant concentrations before it reaches surface water. Surface water flowing offsite meets Colorado water quality standards.

See also:
How is water measured?
https://environmentalrecords.colorado.gov/HPRMWebDrawerHM/RecordView/453458

Residual surface soil contamination

The cancer risk estimates for those areas that contain one or more contaminants of concern are at the low end of EPA's risk range; in other words, less than a one in 100,000 risk of developing cancer due to exposure. Estimates of noncancer health effects indicate that those toxic effects, resulting from both short- (acute) and long-term (chronic) exposure, are also unlikely. Radiological dose estimates are less than one millirem per year (mrem/yr), which is less than a chest X-ray (10 mrem), less than the state's 25 millirem radiological standard and far less than the radiation from food we typically ingest each year (40 mrem). For the rest of the site where contaminants of concern have not been detected, risks are expected to be similar to those associated with background conditions. The average concentration of plutonium in surface soil in the Central Operable Unit is 2.3 picocuries/gram. That amount represents a less than one in a million cancer risk to a refuge worker or visitor.

Plutonium Benchmark Levels in Surface Soil

Background (Front Range average)	0.066 pCi/g
State Pu in soil requirement	0.9 pCi/g
Residential risk range	2.5 - 250 pCi/g
Wildlife refuge worker risk range	9.8 - 980 pCi/g
Average concentration in refuge	1.1 pCi/g
Highest concentration in refuge	19 pCi/g
Average concentration in Central OU	2.3 pCi/g
Highest concentration in Central OU	49 pCi/g

Residual subsurface contamination

Some subsurface contamination remains in the two landfills, a cluster of several ash pits, and in those burial trenches where contaminant levels did not require removal. A few buried building slabs also remain; most were cleaned-closed; two have some residual radioactive contamination "fixed" in building concrete more than six feet below the surface. Most of the process waste lines were removed except for some segments, which were flushed, then grouted in place.

Ecology

Major vegetation communities include xeric tallgrass prairie (largest example left in Colorado), mixed mesic grasslands, tall upland shrublands, wetlands, and riparian woodlands. These habitats support a rich diversity of wildlife, which has been relatively undisturbed during the past 60 years due to the security at the plant site.

See also:
How are plants affected by radionuclides in soil?
https://environmentalrecords.colorado.gov/HPRMWebDrawerHM/RecordView/453460

Are animals affected by radionuclides at the site?
https://environmentalrecords.colorado.gov/HPRMWebDrawerHM/RecordView/453459

The Department of Energy (DOE) is responsible for ongoing surveillance and maintenance, including:

- Groundwater treatment (four active or passive treatment systems);
- Sampling the groundwater well network (88 monitoring locations);
- Sampling surface water monitoring stations (19 locations);
- Monitoring and maintenance of the two landfills; and
- Conducting other environmental monitoring and maintenance as required.

See also:
What are the monitoring requirements for the site?
https://environmentalrecords.colorado.gov/HPRMWebDrawerHM/RecordView/453462